APPENDIX

Facts with Respect to the Competitive Market

A. The Singer 401 machine competes with all manner of sewing machines.

The broad extent of the competitive market in which the Singer 401 machine is sold is made clear by the trial court in connection with its finding that Singer had no intent and made no attempt to achieve an illegal monopoly.*

The trial court found that Singer, in its attempt to eliminate infringers of Gegauf Patent No. 1, left

> "as competitors all manner of sewing machines with devices capable of doing the same thing over which Singer had no control. * * *
>
> "* * * If it were necessary to our decision, we would find the relevant market to be automatic zigzag sewing machines of four types: machine carried multicam zigzag, replaceable cam, manually operated and the straight stitch sewing machine with zigzag attachment. These four machines, we find, are sufficiently unique to constitute a separate market within which these machines are reasonably interchangeable for the use to which they are put. * * *" (Op., R. 1716-17)

These findings are supported by the testimony of defendant's witnesses, exhibits in the form of competing machines and samples of the work produced by these machines, and admissions of plaintiff's counsel and plaintiff's own witnesses.

The uncontradicted evidence shows that the Singer 401 machine with a machine-carried multiple cam device covered by the Gegauf patent was and is in competition with numerous other sewing machines with machine-carried multiple

* The Government does not challenge the trial court's holding that Singer did not attempt to monopolize (Govt. Br. 21, n. 16).

cam devices which do not infringe any patents owned by Singer (R. 228, 230, 231-32; Hutton, R. 611-12; Dx. 112, 112B, 113, 113B, 114, 115; Gx. 207). The trial court had placed in evidence before it sewing machines from both Japan and Europe with machine-carried multiple cam devices which it is conceded do not violate any of the Singer patents and which are available to any housewife (Dx. 112, 113, 114, 115; Gx. 207; Stip. Pars. 94-96, 128-29, R. 58-59, 65; Gx. 188-90 (S-22-S-23), R. 1332; Billings, R. 977). These show not only competition in sewing machines with this very type of device but they also show how easy it is to build around the Singer patents and how narrow is the coverage of these patents. Singer in fact had been offered other such devices on three different occasions—by Pfeffercorn in 1954, by Haas in 1955 and by Gegauf in 1957 (Dx. 1-3, R. 1365-70; Gx. 53, R. 1100-02). Swatches of material (Dx. 112B, 113B, Hutton, R. 611-12) on which various patterns of zigzag stitches had been stitched, using non-infringing machine-carried multiple cam devices were received in evidence showing that these devices do just as good a job as the infringing devices (R. 228, 230, 231-32; Dx. 112, 112B, 113, 113B, 114, 115; Gx. 207; Hutton, R. 611-12; Stip. Pars. 94-96, 128-29, R. 58-59, 65; Gx. 188-89 (S-22-S-23), R. 1332; Billings, R. 977).

Government counsel made important, though short-lived, admissions on the competitive nature of these non-infringing machines (R. 228). Government counsel stated:

> *"The government concedes that Defendant's Exhibit 112 is not covered by the Gegauf patent. It concedes that the function of the machine and the work product of the machine stitch patterns may be the same."* (228, emphasis supplied)

The following colloquy thereupon took place between the trial court and the Government counsel:

> "The Court: *The united work product of both of these machines is the same.*
>
> Mr. Elkins: *Right, your Honor.*
>
> The Court: And Exhibit 112 is not an infringement of Gegauf No. 1.
>
> Mr. Elkins: That is true, your Honor.
>
> The Court: *And Exhibit 112 may be used in the household as a substitute for 111.*
>
> • • • • •
>
> Mr. Elkins: I do not want to testify, your Honor. We are merely representing that it does not appear that both machines are alike in relation to their mechanisms. There might be a difference in the effectiveness and the durability of the mechanisms of the two machines. *We do agree that the stitch pattern created would be the same in each machine.*
>
> The Court: *And the household work product would be the same.*
>
> Mr. Elkins: *It would be.*
>
> The Court: *That is another way of saying that one could be substituted for the other.*" (R. 230, emphasis supplied)

The following day the Government attempted to hedge on these admissions and stated that it did not concede that the non-infringing mechanism was the "functional equivalent" of the infringing mechanism (R. 232, but see R. 977).

Before the end of the trial, the following colloquy took place:

> "The Court: • • •
>
> Now assuming these machines are properly manufactured by a competent factory, will they serve the same purpose and meet the same customer demand as the Singer machines?

> Mr. Weinstein [another Government counsel]: We take no position on these machines, your Honor, except to admit that they are built-in cam machines. • • •" ((unprinted), Tr. 2104)

The Government now apparently, though certainly not directly, concedes what the evidence made clear, that these machines are all competitive with each other (Govt. Br. 4).

Sewing machines with these non-infringing devices in 1959, the year after the Gegauf patent issued, amounted to almost one-third of all sewing machines with machine-carried multiple cam devices imported into the United States from Japan and almost 500% of the number imported the year before (Dx. 189, R. 1586; Gx. 191 (S-25), R. 1334).

As stated in the holding of the trial court above quoted, the market in which the machines covered by the Gegauf patent compete includes not only machine-carried multiple cam machines but replaceable cam machines, manually operated machines and straight stitch machines with zigzag attachments. The record is replete with evidence to support the trial court's finding (Op., R. 1716-17; Hutton, R. 621; Bruder, R. 743, 773, 783, 848; Cohen, R. 878-79; Barnum, R. 939-40; Hovsepian, R. 961).

Nowhere in its brief does the Government dispute the fact that all types of household sewing machines compete. The Government's own witness, called as an expert, Mrs. Hovsepian, frankly admitted on cross-examination that "all machines compete with all machines" (R. 961). This competition is in price, in quality and in variety of features (Op., R. 1659).

All household sewing machines sold today are capable of sewing zigzag stitches and zigzag stitch patterns (Hutton, R. 606, 648, 685-86, 689-93; Bruder, R. 744). The Government erroneously states that the straight

stitch machine can sew only a straight line. It however concedes that all of the other types of machines "can produce various ornamental and functional zigzag stitches as well as straight stitches" (Govt. Br. 3-4). All straight stitch sewing machines equipped with a zigzag attachment do sew zigzag stitches. The Singer 404 straight stitch machine is sold with a zigzag attachment, in which different cams may be inserted, as standard equipment (Hutton, R. 602-04, 648, 685-86, 689-93; Brúder, R. 744). The Government in its brief gives the impression that only the machine-carried multiple cam machine "can produce any one of a large number of different zigzag stitches" (Govt. Br. 4). The fact is that any one of a large number of different zigzag stitches can be made with the replaceable cam machine, the manually operated machine, and the zigzag attachment to a straight stitch machine (Dx. 106C, 116C, 141C, 143).

Sewing machines equipped with any of such three types of mechanisms for making zigzag stitches compete in the market for the customer's favor with sewing machines with machine-carried multiple cam devices. (Op., R. 1716-17).* The trial court had presented before it as exhibits sewing machines equipped with various and different devices that may be used to make zigzag stitches. All of these devices make zigzag stitches of both a functional and ornamental character with reasonable facility and comparable results (Hutton, R. 647-48, 684-85). As the trial court found, "these machines are reasonably inter-

* In this connection it is significant that, while from 1957 to 1959 imports of Japanese-manufactured sewing machines with manual devices and replaceable cam devices increased from 22.1% to 46.7% of all Japanese sewing machines imported into the United States, the imports of Japanese-manufactured sewing machines with multiple cam devices increased from only 3.3% to 4.6% of such imports (see chart *infra*, p. 12a).

changeable for the use to which they are put" (Op., R. 1717). The trial court also had presented to it samples of various types of both functional and ornamental zigzag stitches made by the various devices. These were presented first on a dress (Dx. 142; Hutton, R. 606-08) on which both types of zigzag stitches were made by the four different types of devices and then on numerous swatches (Dx. 106C, 116C, 141C, 143) on which were similarly shown the stitches made by the different types of devices.

Sewing machines are complicated and ingenious mechanisms. They come with many different devices which do different things or with different devices for doing the same thing. They come with many varied and different features (Bruder, R. 772-73; Hutton, R. 621). The Singer "400" series of sewing machines, for example, emphasizes the slant needle device, the drop-in bobbin device, the fixed bobbin case, the gear motor drive, and the die-cast aluminum housing (Bruder, R. 764-65). Among the variety of features available with any sewing machine is some device for making zigzag stitches. If a housewife is interested in a zigzag feature she has a choice of numerous sewing machines with various devices which accomplish this purpose (Op., R. 1658; R. 216-17, 219; Hutton, R. 602, 604, 606-09, 613, 648, 685-86, 689-93; Bruder, R. 743-44; Stip. Pars. 6-8, R. 23-25). Some sewing machines without a machine-carried multiple cam device, such as the Kenmore Model 90, the Necchi Supernova Ultra, the Elna Plana Supermatic and the Vigorelli Fantasy, have zigzag features possessed by none of the Singer sewing machines, such as the stitch elongator mechanism, the cam controlled forward and reverse feed and the cam controlled lateral feed. By means of these devices much more elaborate ornamental zigzag patterns may be made than can be

made on any Singer sewing machine, and the Vigorelli Fantasy makes the most elaborate of all (Dx. 146, 146A; Dx. 146B, R. 1543; Dx. 146C (unprinted), Tr. 5554; Dx. 147, 147A, 148, 148C, 149, 149A; Dx. 167 (unprinted), Tr. 5571-73; Hutton, R. 625-38, 640-43).

The Government itself at one point in the trial stated that it agreed with the assertion of defendant's counsel that "there are numerous machines with features that the Singer 401 does not have that compete with the Singer 401, and none of these machines has built-in cams" (R. 626). After a five minute recess, however, the Government withdrew its concession (R. 627) but the fact still remains.

Sewing machines with all four types of devices are to be found in the market at each of a wide variety of price levels (Stip. Par. 146, R. 73-75; Gx. 197 (S-86), R. 1338-39; Ex. S-87-S-92, R. 1633-46; Bruder, R. 756-57, 822-23; Cohen, R. 882). Sewing machines with machine-carried multiple cam devices, sewing machines with replaceable cam devices, and sewing machines with manual devices each sold at price levels varying from $90 to $360 (S-86 through S-92). Straight stitch sewing machines, all of which are capable of taking zigzag attachments are sold at prices ranging at least from $126.95 to $229 (Bruder, R. 822-23) in competition with sewing machines with machine-carried multiple cam devices, replaceable cam devices and manual devices sold within the same range. Within practically whatever price range the housewife may shop, she has equally available to her competing models of sewing machines with machine-carried multiple cam devices, replaceable cam devices, manual devices and zigzag attachment devices (Stip. Par. 146, R. 73-75; Gx. 197 (S-86), R. 1338-39; Ex. S-87-S-92, R. 1633-46; Bruder, R. 756-57, 822-23; Cohen, R. 882).

Prices of sewing machines depend upon numerous factors other than the peculiar device for making zigzag stitches—such as the reputation of the manufacturer, the quality of the sewing machine, other sewing machine features, appurtenances and attachments accompanying the sewing machine, availability of service and parts, type and extent of financing arrangements made available, furnishing of lessons or instructions as to the use of the sewing machine, type and effective time of guarantee, cost of manufacture and distribution, location and type of shop at which the sewing machine is sold, and promotion and advertising expenditures (Op., R. 1659; Bruder, R. 781-82; Stip. Par. 144, R. 72).

The zigzag feature of any sewing machine is a comparatively minor consideration and there are many other features which are more vital to the usefulness of a sewing machine to the housewife. The uncontradicted evidence is that 90% of a housewife's sewing is straight stitching (Hutton, R. 618, 619, 664; Ex. S-49 (unprinted), Tr. 2610). Garments and household furnishings can be made and mending can be done entirely by the use of straight stitching alone (Hutton, R. 613-14, 617). In fact, the patterns supplied by the large commercial pattern companies from which the housewife makes her own dresses, provide only for straight stitching (Hutton, R. 617).

Some prominent retailers with large sales of sewing machines, including Montgomery Ward and Sears, Roebuck, do not carry sewing machines with a machine-carried multiple cam device at all (Op., R. 1706; Bruder, R. 777, 830). In 1961 Sears, Roebuck ceased to import or sell such sewing machines and substituted as its top-of-the-line machine one with a replaceable cam device manufactured in Japan (Op., R. 1706; Stip. Pars. 117,

141, R. 64, 71-72; Bruder, R. 777; Hutton, R. 637-41). This was in spite of the fact that Sears, Roebuck was free to sell sewing machines covered by the Gegauf patent because it has a license from Singer to do so (Op., R. 1706; Stip. Par. 101, R. 61; Ex. S-19 (unprinted), Tr. 2576-79). Montgomery Ward also carried a sewing machine with a replaceable cam device as its top-of-the-line (Dx. 173 (S-432) (unprinted), Tr. 5604).

The fact that sewing machines do differ in their features is the very essence of competition. That is why manufacturers think up devices so that they may compete more effectively with other manufacturers. It may be that the difference in features enables a sewing machine to perform more easily or efficiently in one respect or another. It may be that one has a different feature which makes it peculiarly susceptible to good-selling talk. But they will all sew and they will all sew zigzag stitches. Each product produced by a manufacturer with his own choice of features does not thereby become part of a different market. This Court, in the *Cellophane* case, made this very clear when it said:

> "But where there are market alternatives that buyers may readily use for their purposes, illegal monopoly does not exist merely because the product said to be monopolized differs from others. If it were not so, only physically identical products would be a part of the market." (351 U. S. 377, at 394)

Sewing machines with zigzag attachments, manual devices, replaceable cam devices and machine-carried multiple cam devices are all advertised in the same media, namely, newspapers, magazines, consumer periodicals, trade journals, radio and television (Bruder, R. 761-62, 779; Dx. 164, R. 1563). Sewing machines with each of

these various devices are advertised, in many instances, in the same advertisement (Bruder, R. 748-49, 779; Gx. 200, R. 1343; Dx. 156, R. 1551). In its advertising, Singer presented its 401, 403 and 404 machines as being a group of three sister sewing machines, all of which would perform substantially the same function (Op., R. 1670; Bruder, R. 758-59; Gx. 200, R. 1343; Dx. 164, R. 1563).

Manufacturers, wholesale distributors and retailers do not confine themselves to the manufacture, distribution and sale of sewing machines with a particular type of zigzag device (Bruder, R. 743-44, 777-79). Manufacturers sometimes manufacture sewing machines with two or three types of devices (Bruder, R. 778; Stip. Pars. 91, 114, R. 57, 63; Ex. S-18, S-21, R. 1619-20, 1622). Wholesale distributors ordinarily carry sewing machines with several types (Bruder, R. 778; Barnum, R. 939; Margulies (unprinted), Tr. 2073-75; Stip. Pars. 90, 113, R. 57, 63; Ex. S-17, S-20, R. 1618-19, 1621). Retailers do not carry sewing machines with machine-carried multiple cam devices to the exclusion of sewing machines with other types (Bruder, R. 777-78). Retailers do not physically segregate, for purposes of sale, sewing machines which are provided with, or can be provided with, the different devices for making zigzag stitches, but rather offer all household sewing machines together as a group (Bruder, R. 743, 778-79).

The trial court's finding that sewing machines with machine-carried multiple cam devices, sewing machines with replaceable cam devices, sewing machines with manual devices, and sewing machines with zigzag attachments are all part of one market, meets every economic and legal test: These sewing machines all compete for the buyer's favor. They are all available in the same product market to the buyer. They all have reasonably

similar uses and they are reasonably interchangeable and acceptable for the same purposes.

B. The vigor of the foreign competition which Singer had to meet.

By 1959 the over one million sewing machines imported from these Japanese manufacturers and exporters operating under a cartel system constituted 63.7% of the household sewing machine market in the United States (Dx. 185, R. 1581; Dx. 191, 192, R. 1587, 1588; Dx. 172, R. 1570; Cohen, R. 914-15, 921-22). During the ten years preceding the trial of this case the household sewing machine industry in Japan had been consistently one of the top three export industries of Japan. Such industry had several times been the second largest export industry in Japan; it frequently had been the third largest export industry in Japan, and occasionally had been the fourth largest export industry (Fairman, R. 805-06, 798-99).

Many Japanese manufacturers and exporters have either set up sales subsidiaries in the United States or have purchased controlling interests in domestic distributors of sewing machines, including the Nippon Sewing Machine Company, which owns Brother International Corporation; Janome Sewing Machine Company, which recently purchased New Home Sewing Machine Company and its distribution outlets in the United States; and Fujikoyo Industries, which owns the Fuji Industrial Company in the United States (Op., R. 1667; Stip. Par. 98, R. 60-61; Fairman, R. 809-11).

These Japanese manufacturers and exporters operate under a system authorized by Japanese laws under which the Government of Japan, working with or through Japanese associations of manufacturers and exporters of household sewing machines, controls and is authorized by

the law of Japan to control the export of such sewing machines from Japan to the United States by (a) fixing the minimum prices at which such sewing machines may be exported, (b) fixing the maximum quantity of such sewing machines which may be exported, (c) allocating sewing machines for export among the various exporters, (d) registering factories which may manufacture such sewing machines for export, (e) fixing detailed standards of minimum quality with which such sewing machines must comply before such sewing machines may be exported, and (f) prescribing the time and methods of payment for such sewing machines which are exported (Fairman, R. 801-09, 821; Sogi, R. 886-98; Dx. 176-83 (unprinted), Tr. 5676-5742).

The vigor of the foreign competition is apparent from the statistics set forth in the following paragraphs:

(1) The following number of household sewing machines were exported from Japan to the United States in the years 1957, 1958 and 1959 (Gx. 191 (S-25), R. 1334; Ex. S-31-S-33, R. 1623-25; Dx. 189, R. 1586; Dx. 175, R. 1578; Bruder, R. 744):

	1957	%	1958	%	1959	%
Straight Stitch	679,736	(74.3)	643,407	(65.5)	567,389	(45.5)
Zigzag Type Unknown..	1,925	(0.3)	78	(—)	40,127	(3.2)
Manual	117,121	(12.8)	202,041	(20.6)	375,111	(30.1)
Replaceable Cam	85,368	(9.3)	91,396	(9.3)	206,539	(16.6)
Machine-Carried Multiple Cam	30,142	(3.3)	44,994	(4.6)	57,732	(4.6)
Total	914,292	(100)	981,916	(100)	1,246,898	(100)

(2) The combined total of Japanese made and European made household sewing machines, not including Singer machines, imported into the United States as well as the

percent relationship which imported sewing machines with machine-carried multiple cam devices bear to the combined total is as follows (Gx. 191 (S-25), R. 1334; Ex. S-31-S-33, R. 1623-25; Dx. 189, R. 1586; Dx. 175, R. 1578; Bruder, R. 744; Gx. 194 (S-28), R. 1336; Dx. 184, 186, R. 1579, 1582; Dx. 191, R. 1587; Cohen, R. 918):

Year	Total European and Japanese Sewing Machines	Machine-Carried Multiple Cam
1957	1,077,943	4.6%
1958	1,109,271	6.0%
1959	1,370,645	7.2%

(3) The share Japanese manufacturers, European manufacturers and Singer had of the household sewing machine market in the United States for the years 1957, 1958 and 1959 is as follows (Ex. S-31-S-33, R. 1623-25; Gx. 190 (S-24), R. 1333; Dx. 184, 186, R. 1579, 1582; Dx. 191, 192, R. 1587, 1588; Cohen, R. 918; Dx. 188, R. 1585; Dx. 187, R. 1583; Dx. 172, R. 1570):

	1957	%	1958	%	1959	%
Japan	914,292	(55.4)	981,916	(60.3)	1,246,898	(63.7)
Singer	507,417	(30.8)	517,524	(31.9)	584,294	(29.9)
Europe	163,651	(10.0)	127,355	(7.8)	123,747	(6.4)
Non-Singer U. S. Production	63,000	(3.8)	—	(—)	—	(—)
Total	1,648,360	(100)	1,626,795	(100)	1,954,940	(100)

The above figures show that:

(a) Japanese-made household sewing machines are the most important factor in and dominate the United States market, their share amounting to 63.7% thereof.

(b) While the share of Japanese-made sewing machines in the United States market has been growing, the share

of European-made as well as Singer-made sewing machines has declined *and virtually all non-Singer United States production has ceased.*

C. The Japanese and European manufacturers were free at all times to manufacture and sell non-infringing sewing machines with machine-carried multiple cam devices.

Gegauf Patent No. 1 is a patent of exceedingly narrow scope. This is demonstrated by an analysis of claim 1, the "broad" claim, of such patent. In order to infringe such claim, a machine-carried multiple cam mechanism must incorporate therein, among others, each of the following features or their equivalents (Stip. Par. 92, R. 58):

(1) a series of rotary cams having different stitch pattern configurations and mounted about a common axis;

(2) a cam follower mounted for movement radially of the common axis and having a single cam-engaging head with one end engaging and responding to the surface of a cam of the series; and

(3) a manually operable member for withdrawing the cam-engaging head from and radially of a selected cam surface; with

(4) the series of cams and the single cam-engaging head being relatively shiftable lengthwise of the common cam axis after the cam follower has been withdrawn radially from a selected cam, thereby to effect a partial or a complete traverse of the series of rotary cams, whereby the single cam-engaging head can be manually engaged with one cam after the other in any desired sequence.

The narrowness of the Gegauf Patent No. 1 and the ease with which it has been built around is demonstrated by the increasing number and proportion of non-infringing

sewing machines having machine-carried multiple cam mechanisms which have been and are being imported into the United States from Japan (Gx. 191-92 (S-25-S-26), R. 1334-35).

In 1958 and 1959 companies started manufacturing machines with non-infringing machine-carried multiple cam mechanisms. The result was that in 1958 machines with mechanisms not infringing Gegauf Patent No. 1 represented 8½% of the machine-carried multiple cam machines imported into the United States from Japan. In 1959 machines with mechanisms not infringing such patent represented 32% of the machine-carried multiple cam machines imported into the United States from Japan (Gx. 191, 192 (S-25-S-26), R. 1334-35; Stip. Par. 91, R. 57; Ex. S-18, R. 1619-20). In other words, such non-infringing machines had increased from zero in 1957 to 8½% in 1958 to 32% in 1959, the number of such imports in 1959 being 500% of the number of similar imports in 1958 (Gx. 191 (S-25), R. 1334).

Five models of machine-carried multiple cam sewing machines being imported from Japan and Europe which do not infringe Gegauf Patent No. 1 were introduced into evidence before the trial court (Op., R. 1716; Gx. 207; Dx. 112, 112B, 113, 113B, 114, 115; Stip. Pars. 94-97, R. 58-60). As was demonstrated by the testimony, these machines are fully competitive in every respect with the Singer 401 machine (Hutton, R. 611; Billings, R. 977-78, 981, 983-89; Herbst, R. 992-1002; Curreri, R. 1004). There is no reason why machine-carried multiple cam mechanisms not infringing Gegauf Patent No. 1 cannot be made to any extent and in numerous forms and variety by Japanese or other manufacturers who wish to make them.